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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,586

03/27/2006

Seiji Oka

DK-US030767

9457

22919 7590 02/03/2009  
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EXAMINER

OREILLY, PATRICK F

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

02/03/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,586	<b>Applicant(s)</b> OKA ET AL.	
	<b>Examiner</b> Patrick F. O'Reilly III	<b>Art Unit</b> 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is in response to applicant's amendment received on October 28, 2008.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-8, 10, and 14-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Korean Patent Application Publication No. KR 10-1999-020737 ("KR '737") in view of Manson et al. (US 5,720,176). These two references, when considered together, teach all of the elements recited in **claims 1-8, 10, and 14-21** of this application.

4. In particular, claim 1 of this application is obvious when the KR '737 reference is viewed in light of Manson et al. The KR '737 reference discloses the invention substantially as claimed, including: an air conditioning mechanism (indoor unit 1 of the air conditioning system) configured and arranged to perform air conditioning of indoor air; an air deflector (including vertical blade 11 and horizontal blade 13) configured and arranged relative to the air conditioning mechanism (1) to selectively adjust air flow direction of conditioned air discharged from the air conditioning mechanism (1); and a control unit (control means 116) operatively coupled to said air conditioning mechanism (1) and said air deflector (11, 13) to control operation of said air conditioning mechanism (1) and said air deflector (11, 13), said control unit (116) being configured to selectively operate said air conditioning mechanism (1) in a plurality

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of operation modes (e.g., automatic, cooling dehumidifying, air blow, heating, etc.) including a powerful operation mode (short-distance mode) whereby the fan speed of said air conditioning mechanism (1) is temporarily increased, said control unit (116) being configured to selectively operate said air deflector (11, 13) to selectively adjust the air flow direction of said air deflector (11, 13) between a plurality of air flow directions, and said control unit (116) being further configured to set the air flow direction (the vertical blade 11 is set to a downward fixed angle of about 15°, whereas the horizontal wind blade 13 is driven in a determined swing range) to a predetermined air flow direction of the plurality of air flow directions when the powerful operation mode (short-distance mode) is selected regardless of the air flow direction prior to when the powerful operation mode (short-distance mode) is selected, the powerful operation mode (short-distance mode) being selected by a user (the user selects the short-distance key on the remote controller 9) with the control unit (116) switching to the powerful operation mode (short-distance mode) from a prior operation mode (e.g., cooling or heating mode) upon selection of the powerful operation mode (short-distance mode) by the user, the air flow direction being set to the predetermined air flow direction (the vertical blade 11 at a downward fixed angle of about 15°, and horizontal wind blade 13 driven in a determined swing range) when the powerful operation mode (short-distance mode) is selected by the user (when the user presses the short-distance key on the remote controller 9) regardless of the air flow direction prior to selection of the powerful operation mode (short-distance mode), and the air flow direction returning to the air flow direction (e.g., in the cooling or heating operation mode) prior to selection of the powerful operation mode (short-distance mode) after the powerful operation mode is turned off (by the user pressing the short-distance key again). Refer to KR '737, Figures 2-3 and 4a-4b;

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also refer to the previously provided English translation for KR '737, pages 4-5, 7-8, and 13-17 (non-machine generated).

However, claim 1 of this application further discloses that, in the powerful operation mode, the heat exchanging operation of the air conditioning mechanism is temporarily increased for a predetermined time, and the air conditioning mechanism returns to the previous operating mode after the predetermined amount of time has expired. The KR '737 reference does not expressly disclose these additional limitations.

Manson et al., although, teaches an air conditioning unit having a powerful operation mode (burst cooling mode) that lasts for a predetermined amount of time (15 minutes, which is regulated by a timing means in processor U1), wherein the fan is energized at high speed and the compressor is turned on so as to achieve maximum cooling during the 15-minute burst cooling mode for the purpose of better accommodating the user's comfort preferences. See Manson et al., Figures 3 and 10; column 10, lines 5-67. Therefore, when the KR '737 reference is viewed in light of Manson et al., it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the air conditioning unit of the KR '737 reference by additionally operating the air conditioning unit in the powerful operation mode for a predetermined amount of time (e.g., 15 minutes) by incorporating a timing means and providing maximum cooling during that time by operating the compressor and running the fan at a high speed, as taught by Manson et al., in order to better accommodate the user's comfort preferences and obviate the need for the deactivation of the powerful operation mode by the user.

5. In regard to claim 2, the KR '737 reference further discloses that the control unit (control means 116) is configured and arranged such that the predetermined air flow direction of said air

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deflector (11, 13) during the powerful operation mode is set so that air is discharged in a direction in which people are present (during the short-distance mode, the oscillation range of horizontal wind blade 13 includes a direction in which people are present). Refer to the previously provided English translation for KR '737, pages 13-17 (non-machine generated). It is noted that this claim does not require the air to be discharged *only* in a direction in which people are present. Therefore, the KR '737 reference in view of Manson et al. also meets the language of this claim.

6. In regard to claim 3, the KR '737 reference further discloses that the control unit (control means 116) is configured and arranged such that the predetermined air flow direction of said air deflector (11, 13) during the powerful operation mode is set so that air is discharged in a direction in which people are not present (during the short-distance mode, the oscillation range of horizontal wind blade 13 also includes a direction in which people are not present). See the previously provided English translation for KR '737, pages 13-17 (non-machine generated). It is noted that this claim does not require the air to be discharged *only* in a direction in which people are not present. Consequently, the KR '737 reference in view of Manson et al. also teaches the language of claim 3.

7. In regard to claim 4, the KR '737 reference further discloses that the control unit (control means 116) is configured and arranged such that the predetermined air flow direction of said air deflector is set at a fixed orientation during said powerful operation mode (during the short-distance mode, the vertical blade 11 of the air deflector is set to a downward fixed angle of about 15°). Refer to the previously provided English translation for KR '737, pages 13-14 (non-

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machine generated). Thus, the KR '737 reference in view of Manson et al. also meets the language of claim 4.

8. In regard to claim 5, the KR '737 reference further discloses that said control unit (control means 116) is configured and arranged such that the predetermined air flow direction of said air deflector is set to change a swing range of said air deflector to a different swing range during the powerful operation mode (during the short-distance mode, the horizontal wind blade 13 is driven in a determined mode-specific swing range). See the previously provided English translation for KR '737, pages 13-17 (non-machine generated). Therefore, the KR '737 reference in view of Manson et al. also meets the language of this claim.

9. In regard to claim 6, the modified air conditioning unit of the KR '737 reference further teaches a timer (timing means) configured and arranged to selectively limit a time (e.g., 15 minutes) in which said control unit (control means 116) performs the powerful operation mode (short-distance mode). Refer to Manson et al., column 10, lines 5-67. Consequently, the KR '737 reference in view of Manson et al. also teaches the language of claim 6.

10. In regard to claim 7, the modified air conditioning unit of the KR '737 reference further teaches that the control unit (control means 116) is further operatively coupled to said timer (timing means) such that a time at which said air deflector is stopped (e.g., 15 minutes) during the powerful operation mode (short-distance mode) is set in said timer (timing means. See Manson et al., column 10, lines 5-67. Thus, the KR '737 reference in view of Manson et al. also meets the language of claim 7.

11. In regard to claims 8, 16, and 19, the KR '737 reference further discloses that the air deflector (11, 13) comprises a vertically movable flap (vertical blade 11 of the air deflector).

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Refer to the previously provided English translation for KR '737, pages 13-14 (non-machine generated). Therefore, the KR '737 reference in view of Manson et al. also meets the language of these claims.

12. In regard to claim 10, the KR '737 reference further discloses that the control unit (control means 116) is further configured and arranged to operate said air conditioning mechanism (1) in either a cooling operation or a heating operation. See the previously provided English translation for KR '737, page 8 (non-machine generated). Consequently, the KR '737 reference in view of Manson et al. also teaches the language of claim 10.

13. In regard to claims 14 and 17, the KR '737 reference further discloses that the control unit (control means 116) is configured and arranged to selectively maintain the air flow direction of said air deflector at a fixed orientation during the powerful operation mode (during the short-distance mode, the vertical blade 11 of the air deflector is set to a downward fixed angle of about 15°). Refer to the previously provided English translation for KR '737, pages 13-14 (non-machine generated). Thus, the KR '737 reference in view of Manson et al. also meets the language of claims 14 and 17.

14. In regard to claims 15 and 18, the KR '737 reference further discloses that said control unit (control means 116) is further configured and arranged to selectively change a swing range of said air deflector to a different swing range during the powerful operation mode (during the short-distance mode, the horizontal wind blade 13 is driven in a determined mode-specific swing range). See the previously provided English translation for KR '737, pages 13-17 (non-machine generated). Therefore, the KR '737 reference in view of Manson et al. also meets the language of these claims.



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15. In regard to claim 20, the KR '737 reference further discloses that said control unit (control means 116) is configured and arranged such that the predetermined air flow direction of said air deflector is set to swing said air deflector within a fixed range of swinging movement during said powerful operation mode (during the short-distance mode, the horizontal wind blade 13 is driven in a fixed mode-specific swing range). See the previously provided English translation for KR '737, pages 13-17 (non-machine generated). Consequently, the KR '737 reference in view of Manson et al. also teaches the language of claim 20.

16. In regard to claim 21, the KR '737 reference further discloses that the air conditioning mechanism includes an indoor unit (1) with an indoor heat exchanger (15) and an outdoor unit with an outdoor heat exchanger that is connected to the indoor unit (1). Refer to the previously provided English translation for KR '737, pages 3-4 (non-machine generated). Thus, the KR '737 reference in view of Manson et al. also meets the language of claims 14 and 17.

### ***Response to Arguments***

17. Applicant's arguments with respect to pending claims 1-8, 10, and 14-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick F. O'Reilly III whose telephone number is (571) 272-3424. The examiner can normally be reached on Monday through Friday, 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven B. McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Patrick F. O'Reilly III/  
Examiner, Art Unit 3749

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749